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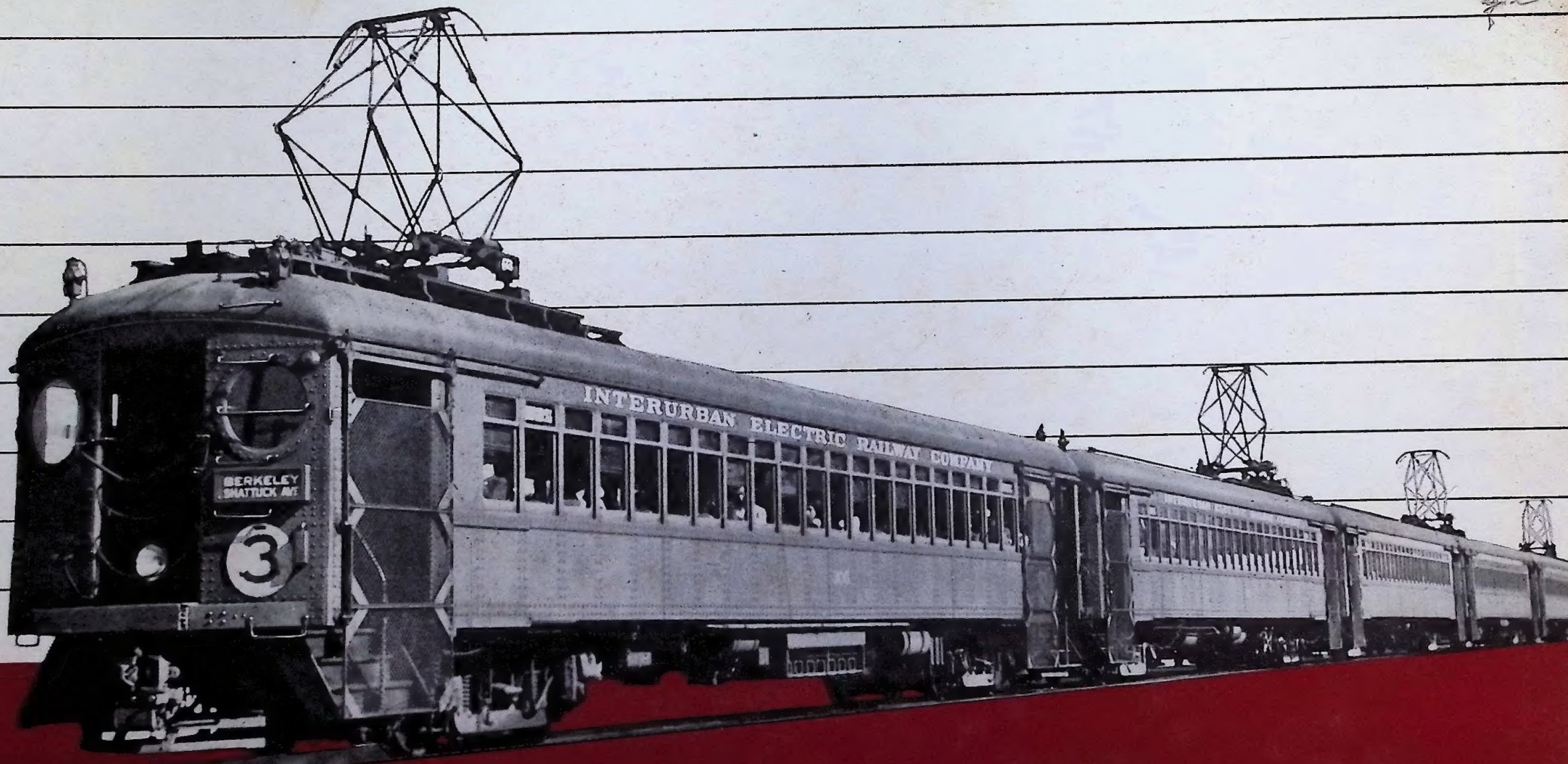

TRAINS ALBUM OF PHOTOGRAPHS

ELECTRIC RAILWAYS

NUMBER 7

Trains Album of Railroad Photographs

Book 7

ELECTRIC RAILWAYS

Kalmbach Publishing Co.
Milwaukee 3, Wisconsin

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Courtesy General Electric Co

The electric railway is a dual personality. It is a distinct institution of social and economic importance which attained its zenith some 30 years ago when interurban lines networked most of the well-populated areas of the United States. And it is also an engineering tool, a type of motive power used not only by the so-called "electric railways" but by the "steam" roads.

The interurban was no doubt overdeveloped, for with characteristic American optimism lines were built everywhere with little attention to whether the traffic potential would make them profitable. But it also came at just the wrong time, for it was the original form of improved highway, and it wasn't long before highways were paved with concrete instead of steel and gasoline supplanted juice for most local transportation.

Twenty years ago a sight to see was Traction Terminal, Indianapolis, with cars continually coming and going under its huge train shed. Limits for Dayton, O., locals for Fort Wayne, sleeping-car trains for Louisville, locals for Terre Haute—12 lines radiated like spokes in a wheel. With connections these reached 800 cities and towns on 5000 miles of track in six states. All that is gone, but in return we have heavier traffic than ever handled out of Chicago by the Illinois Central suburban, the North Shore Line, the South Shore Line and the Chicago, Aurora & Elgin. The Lake Shore Electric no longer dispatches its heavy steel limiteds between Cleveland and Toledo, but the Cleveland Rapid Transit now handles more passengers on private right of way in and out of the terminal on Public Square than the old Lake Shore ever moved over the west side streets of Cleveland.

The electric railway as an institution still exists, but it is much more specialized, doing jobs to which it is best suited instead of trying everything. Lines which could not realize the economies of trainload operation were running not much more than steel-tired buses and trucks, and so they died, unable to keep up the track and power systems. But the lines with traffic enough for train operation grew, because trains are the most efficient way of moving people and goods in quantity. The romantic interest of hundreds of separate small companies has been lost, and so has the fun of planning cross-country jaunts of hundreds of miles by interurban. But on the rides which are left things happen so thick and fast that one has trouble keeping up. Sixty or seventy trains in a rush hour, signal systems which even include automatic speed control, trains of 10 or more cars operated by multiple-unit control, freight trains of up to 90 or 100 cars, speeds up to 100 miles an hour—all these are for the electric fan.

As an engineering tool, however, the electric railway has far outgrown itself, for here it has been adopted as the means for efficiently operating already great and busy railroad divisions, as diverse as the 656 miles of Milwaukee Road across the Rockies and Cascades and the eastern lines of the Pennsylvania, where electric power makes possible the handling of the world's heaviest railroad traffic on an existing four tracks instead of on six tracks as would be required if steam had been continued.

In this book we give a picture, both in photos and captions, of both types of electric railway. The selection is representative rather than exhaustive. As in our other Trains Albums of Railroad Photographs, the paper and ink are specially designed for the highest type of photographic reproduction, with sharp, clear detail. We've printed on only one side so you can frame the pictures or use them in scrapbooks.

For those who wish to find out more about electric railways we suggest membership in the two electric fan organizations, Electric Railroaders' Association, 51 W. 35th Street, New York City, or Central Electric Railfans' Association, 1240 Edison Building, Chicago.

TRAINS' ALBUM OF RAILROAD PHOTOGRAPHS

Book 1—Eastern Railroads.

Book 2—Far Western Railroads.

Book 3—Midwestern Railroads.

Book 4—Colorado Railroads.

Book 5—Southern Railroads.

Book 6—New England Railroads.

Book 7—Electric Railways.

Book 8—Pennsylvania Railroad.

Book 9—New York Central Railroad.

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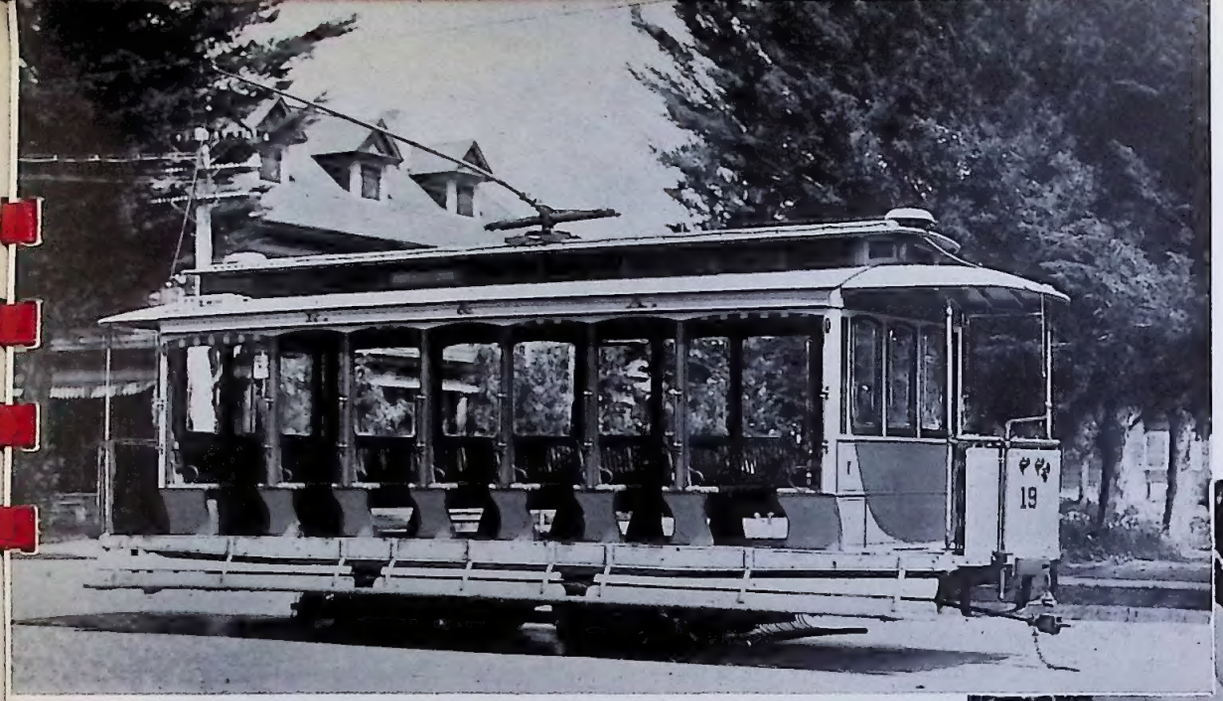
A freight train crossing Lisbon Trestle on the Sacramento Northern. The Comet and other passenger trains once rolled across this two-mile trestle west of Sacramento during the course of the longest interurban passenger run in the United States, San Francisco to Chico, 176 miles. Now the line has no passenger service at all, but is a valuable freight feeder for its parent company, Western Pacific. By Fred Fellow Jr.

Above is one of the high-capacity articulated units used on the Washington, Baltimore & Annapolis before the Washington end of the line was abandoned. The Baltimore end is still operated as the Baltimore & Annapolis Railroad under B&O management, and trains run into the upper trainshed of historic Camden Station in Baltimore. From George Krambles collection. The Pacific Electric train is made up of the heavy 1200-series cars, some with modernized paint job, which render most of the interurban service on this largest of all such systems. PE has 476 miles of track in freight service, 152 miles in passenger service, and 268 miles in joint freight and passenger service, all in the Los Angeles area. More than 2350 electric trains are run daily, principally out of two specialized terminals in downtown Los Angeles, one a subway and the other elevated.



The little open car is one of the cornerstones upon which Pacific Electric was built, No. 19 of the Riverside & Arlington. This line was opened in 1903 by Henry Huntington, and was later consolidated with other Huntington electric railway properties to form the huge system which is still America's largest interurban network. By Charles P. Lawrence.

A famous old photograph once used to advertise Pacific Electric's since-abandoned scenic route to Mt. Lowe. Frequently the trolley tourist was treated to the spectacle of snow in the mountains and balmy weather at the beaches, all within a few hours' ride on the far-flung Pacific Electric system. By Ira Swett.

From a typical, although plenty busy, interurban line of World War I time (above, from the collection of Richard Wagner), the Chicago North Shore & Milwaukee has developed into an efficient and modern electric railroad serving a dense traffic in the suburban and metropolitan area along Lake Michigan north of Chicago and as far as Milwaukee, 85 miles. The freight train and the standard train, both on the high-speed Skokie Valley Route used by Chicago-Milwaukee trains, are by George Krambles. The streamlined, articulated Electroliner is from the Krambles collection, by C. E. Keevil.

Have you ever ridden 70 miles an hour in a New Haven coach, watching, mile after mile, the people in another coach on a parallel track? It can be done on the four-track section between New Haven and New York, where Pennsylvania Station trains are often on about the same schedule as Grand Central trains. But it is more likely that your passenger train will overtake and pass a local or a freight, as the Gulf Coast Limited, streamlined loco, is doing in this photo, taken just east of Stamford, Conn. By J. D. Bennett.

The streamlined 4-6+6-4 electric locomotives of the New Haven are much similar mechanically to the GG-1 streamlined electrics of the Pennsylvania, and in fact both types run into Pennsylvania Station, New York, the New Haven over the Hell Gate Bridge route via Long Island. Both roads use 11,000 volts single-phase power, and together they form a continuous electrified route of more than 300 miles from Washington to New Haven. Courtesy General Electric Co.

Great Northern passenger train leaving the east portal of the Cascade Tunnel under the Cascade Range in Washington. Courtesy Great Northern.

The Milwaukee Road's transcontinental limited, the Olympian, runs for 656 miles behind electric power, crossing four mountain ranges: the Belts, the Rockies, the Bitter Roots, and the Cascades. Here it is in Montana Canyon behind one of the 42 locomotives built by General Electric for the original Rocky Mountain electrification. All locomotives of this type are now used for freight and newer types have been built for passenger service. Courtesy Milwaukee Road. The right-of-way scene is a typical view in Montana. By Linn H. Westcott.

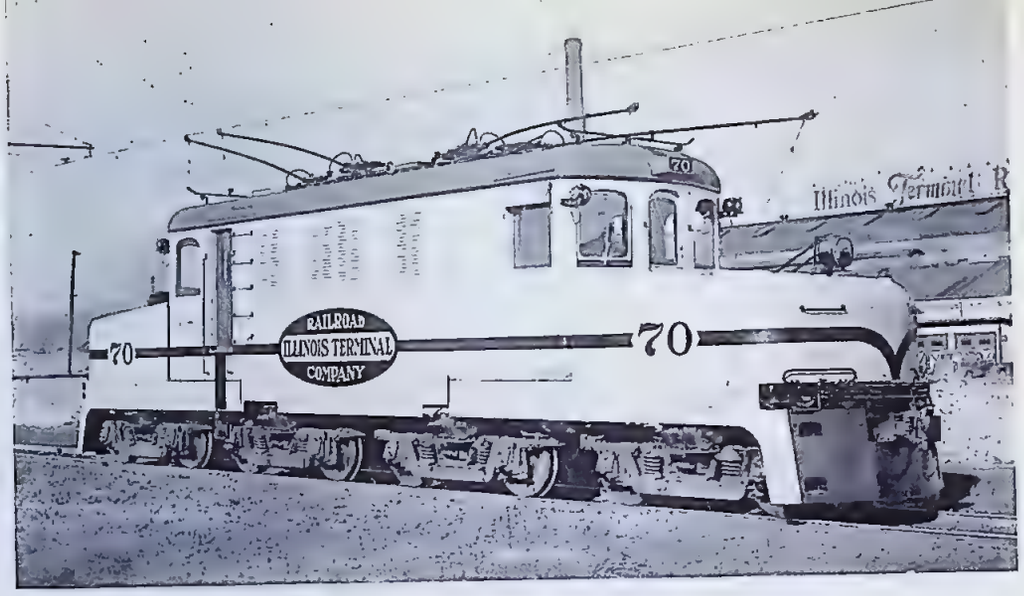
New York Central and Nickel Plate trains are pulled through the Cleveland Union Terminal by 204-ton electric locomotives of 4-6+6-4 wheel arrangement, using 3000 volts direct current from overhead trolley. Locomotive changes are made at east and west ends of the city. Part of the right of way east of the Union Terminal is also used by a rapid-transit line which runs into special loop terminal tracks provided in the large terminal station fronting on the public square which is the heart of downtown Cleveland. Courtesy General Electric Company.

The train on the bridge is a suburban run on the Illinois Central, whose line out of Chicago has tracks set aside only for electric suburban service. At one point the right of way includes six electrified suburban tracks and four for steam. By George Krambles. The train at lower left is on the Interurban Electric, now abandoned suburban subsidiary of the Southern Pacific in the San Francisco Eastbay area. Some of the Interurban Electric routes were taken over by the Key Route, which operates a system formerly competitive with the IE. By Jim Morley. Piedmont & Northern operates two unconnected divisions in North and South Carolina carrying some passenger traffic and a considerable interchange freight business. By William Moedinger Jr.

Southern Pacific at one time operated a number of subsidiary electric lines in the metropolitan areas of the West Coast. Now its only remaining electric operation is the Pacific Electric, world's largest interurban system. Interurban Electric (upper left and front cover) was one of the last to go, and much of its route mileage was taken over and is still operated by competing Key System, lower left on same trackage after IE abandonment. Both photos by B. Thompson. Another SP electric operation was suburban service in the Portland area. A characteristic train is shown above, right, on a typical stretch of line. By A. J. Baker Studio. A West Coast electric line which still does business over a long route is British Columbia Electric Railway, whose longest route is 76 miles from Vancouver to Chilliwack, where the train at right was photographed. By Lieut. W. C. Janssen.

Along the south shore of Lake Erie, between Cleveland and Toledo, the yellow limiteds of the Lake Shore Electric Railway once made their way. They terminated their runs on the Public Square in Cleveland. The city view at top was taken by George Krambles and the front-end speed shot, top right, is by R. Perkin. Another onetime famous and useful Ohio interurban was the Cincinnati & Lake Erie, which made a strong bid for business in the '30's with its high-speed lightweight cars. One of these cars is shown above at the interurban station in Cedar Rapids, Ia., after it had been purchased by the Cedar Rapids & Iowa City but before it had been repainted and before the destination sign had been changed. The car in the background is Waterloo, Cedar Falls & Northern. These Iowa lines are very active. By Paul H. Stringham. A C&LE lightweight is shown at lower right in its original habitat, running as the Golden eagle at Osborne, O. By George Krambles.

High point of the interurban for the entire United States was Traction Terminal in Indianapolis, from which, in the interurban's heyday, lines radiated in 12 directions. Beneath the huge steel trainshed were nine tracks. This shows the terminal soon after its construction in 1904. By Bass, courtesy George Krambles.



Thirty-odd years ago, more or less, Illinois Traction System was one of the biggest interurban properties in the country. Its 628 miles of route were busy with locals, limiteds carrying observation - parlor cars, overnight sleeping-car trains on the Springfield- and Peoria-to-St. Louis runs, and with hundreds of cars of daily freight traffic. It was in those expanding days that the three-car special posed in front of the station in Clinton. The St. Louis-Peoria Illinois Terminal Railroad limiteds of today carry air-conditioned buffet-parlor cars on the longest continuous interurban passenger run in the country, 172 miles, while eight-motored streamlined freight locomotives help trundle a five-million-dollars-a-year freight traffic. Courtesy George Krambles.

The palmy days of the interurban are recalled by the top photo, a Bamberger Railroad Fourth of July special at Farmington, 15 miles north of Salt Lake City. The Bamberger is one of four electric railroads in the Great Salt Lake area, and connects Ogden and Salt Lake City with some 32 passenger runs daily. The unusual name comes from the Bamberger family, who built the line and who once had plans to build east to a connection with Denver. By Fred Fellow Jr. The middle photo is an Annapolis-bound train on the Baltimore & Annapolis, B&O subsidiary and remainder of the onetime Washington, Baltimore & Annapolis. By William Moedinger Jr. Below, a three-car special on the Chicago South Shore & South Bend. By Charles A. Brown.

Milwaukee Electric Lines runs both interurbans and local rapid-transit service right into the heart of the city over a private right of way, some of which is four-tracked with two tracks used by city streetcars. The city car line swings onto the rapid-transit right of way in background of bottom photo. By A. C. Kalmbach. Heavy single-end interurban cars like those above are used for both interurban and local rapid-transit service. By George Krambles.

Piedmont & Northern operates two unconnected electric divisions in North and South Carolina. A connection between the two divisions is proposed. By Lieut. W. C. Janssen. The Jamestown, Westfield & Northwestern runs along the shores of Chautauqua Lake in western New York, connecting the New York Central main line at Westfie!d with the Erie main 'ine at Jamestown. The scene is at the NYC station in Westfie'd. By A. C. Ka!mbach. The Chicago, Aurora & Elgin limited at right is on its way into Chicago from one of the western suburbs served by the road. By Capt. Alexander L. H. Darragh.

Switzerland is a country of electric railroads, both on the heavy-traffic main lines which find in the little republic a European cross-road, and on many local railroads and scenic mountain-climbing routes. The train of the Wengern Alp Railway is climbing toward mighty Jungfrau, left background. More than 80 per cent of all Swiss railroad mileage is electrified. By Nickles, courtesy Swiss Federal Railways.

Great Northern trains are pulled by electric power for 72 miles, including the 7.8-mile Cascade Tunnel, over the Cascade Mountains. Most of the work is done by 2-6+6-2 locomotives of the type shown. Power is delivered to the locomotives as 11,000-volt single-phase A. C., but is changed by motor-generators on the locomotives to direct current for the locomotive motors. Older locomotives are of 2-8-2 wheel arrangement. Notice contact on roof end to pass 11,000-volt power from locomotive to locomotive when several units are running in multiple. Courtesy Great Northern.

The work of electrifying eastern lines of the Pennsylvania Railroad at a cost of more than 150 million dollars was the largest project undertaken by private capital during the depression. It took a vast faith in the future of America to make this investment in increased capacity when the rest of the country was retrenching, and yet the judgment of Pennsylvania management was well vindicated when the electrified lines handled, during World War II, traffic far beyond the wildest estimates of the men who planned the electrification. At left is a train on the Washington line. Courtesy General Electric Co. Below, by Thomas Emden, is a view of the Susquehanna River bridge at Havre de Grace, Md. Bottom, by Herb Weisberger, is a freight running at 50 miles per hour through Colonia, N. J., on the New York Division.

The electrified main line of the Pennsylvania Railroad between New York and Philadelphia, part of the 675 miles of electrified route operated by the road in its eastern territory, carries the world's heaviest railroad traffic. This is the science of mass transportation developed to its highest degree, and electricity has proved to be the power that does the job most efficiently. The train is the President, westbound at full speed behind one of the standard GG-1 locomotives. By W. R. Osborne.